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(Knowledge for Development)

**KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER
MAIN EXAMINATIONS**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY AND
BACHELOR OF SCIENCE IN
BIORESOURC CONSERVATION AND MANAGEMENT**

COURSE CODE: SBT 121

COURSE TITLE: CRYPTOGAMIC BOTANY

DATE: Tuesday 13th July, 2021.

TIME: 2:00 – 4:00 p.m.

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 3 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

QUESTION 1

- a) Define cryptogamic botany and list the relevant examples of plants in this group. (3 Marks)
- b) State **Three** sub divisions of tracheophyta (3 Marks)
- c) Compare the life cycle of ferns to that of moss plants (4 Marks)
- d) With examples state the role of pteridophytes (3 Marks)
- e) Define and state the role of following: (2 Marks)
- i. Rhizoids
 - ii. Stomium
- f) Define the following (3 Marks)
- i. Anisogamy
 - ii. Homosporous life cycle
 - iii. Heterosporous life cycle
- g) Distinguish between acronematic flagellum and pleuronematic flagellum (3 Marks)
- h) State **Two** functions of algae (2 Marks)
- i) State **Two** characteristics of bryophytes (2 Marks)
- j) State **Two** functions of lichens (2 Marks)
- k) Pteridophytes comprise **Three** separate evolutionary lineages. Which ones are they? (3 Marks)

QUESTION 2

Explain classification of cryptogams

(20 Marks)

QUESTION 3

a) Describe sexual reproduction in pteridophytes

(10 Marks)

b) Compare Bryopsida and Marchantiopsida.

(10 Marks)

QUESTION 4

Explain the general morphology and Life cycle of Algae

(20 marks)

QUESTION 5

Describe the economic importance of algae

(20 Marks)